

Remarks

1. Summary of Office Action

In the office action mailed November 16, 2005, the Examiner rejected claims 5-19 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,351,642 (Corbett).

2. Status of Claims

Applicant has cancelled claim 9 and amended various other claims to more particularly point out and distinctly claim the invention. Presently pending are claims 5-8 and 10-19, of which claims 5, 17, 18, and 19 are independent and the remainder are dependent.

As recited by claims 5, 18, and 19, the invention includes functions for establishing an active set for a mobile station, including (i) determining a current physical position of the mobile station, (ii) identifying a group of sectors that each encompass the determined current physical position of the mobile station, (iii) computing a distance respectively between the determined current physical position of the mobile station and each sector (e.g., a point of origin of each sector) of the group, and (iv) selecting as the active set a subset of the group of sectors, at least in part by selecting from the group one or more sectors for which the computed distance is shortest.

As recited by claim 17, the invention includes functions for establishing an active set for a mobile station, including (i) determining a current physical position of the mobile station, (ii) querying a sector coverage database to identify a plurality of sectors that each encompass the determined current physical position, (iii) determining, respectively for each sector of the identified plurality of sectors, a distance between the sector and the determined current physical position of the mobile station, and (iv) selecting from the plurality of sectors at most two sectors having the shortest determined distance, the at most two sectors defining an active set. Further,

claims 17, 18, and 19 add the limitation of providing the active set for transmission to the mobile station.

The invention as thus recited advantageously provides for selecting an active set for a mobile station by first identifying sectors that encompass the mobile station's current physical position and then selecting the active set at least in part by selecting, as a subset of those identified, the sectors to which the mobile station is currently the closest. These functions are described in the specification, by way of example, at page 15, line 17 – page 17, line 7.

3. Response to Rejections

Under M.P.E.P. § 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Applicant respectfully traverses the rejections of claims 5-8 and 10-19 as amended, because Corbett does not disclose or suggest each and every element of any of these claims.

At a minimum, Corbett does not teach the claimed combination of functions including identifying sectors that encompass the mobile station's *current physical position* and selecting an active set for the mobile station at least in part by selecting, as a subset of those identified, the sectors to which the mobile station is currently the closest. In particular, Corbett does not teach the function of computing or determining *the distance between a mobile station's current physical position and a sector*, and thus Corbett necessarily fails to teach the function of using such a distance as a basis to select an active set, in the manner recited in Applicant's claims.

At best, Corbett is concerned with a mobile station's *velocity* and *projected future location*, and particularly the likelihood that the mobile station will arrive in the coverage area of various sectors, given the mobile station's current speed and direction. Specifically, Corbett

teaches estimating a mobile station's future location, and then, for each sector that is proximate to the mobile station, determining how likely it is that the mobile station will arrive in the sector. According to Corbett, that probability is then used to bias the mobile station's pilot signal measurements, e.g., by more greatly increasing the effective measured pilot strength for a sector in which the mobile station is more likely to arrive. As such, ***Corbett is not concerned with how close the mobile station's current physical position is to any particular sector, and thus Corbett does not teach computing such a distance*** as recited in Applicant's claims.

Applicant notes that claims 11, 12, and 17, as they were written and Examined before this response, recited the function of selecting, as the active set, one or two sectors "to which the mobile station is closest." (Emphasis added). Thus, those claims already included the element of considering which sectors are closest to the mobile station's current physical position, as a basis to establish an active set. In rejecting claims 11, 12, and 17, the Examiner appears to have asserted that Corbett teaches the element of selecting sectors to which the mobile station is closest, citing Corbett at column 3, lines 15-23, column 4, lines 56-67, column 5, lines 13-25, column 7, lines 23-51, and column 8, lines 38-65. However, a review of Corbett reveals that none of those portions teaches ***selecting the sectors to which the mobile station's current physical position is closest***. Rather, at best, those portions teach consideration of the likelihood that a ***mobile station's projected future location will be in a particular sector***.

Because Corbett does not teach all of the elements of any of Applicant's pending claims, Corbett does not anticipate any of the pending claims. Applicant therefore submits that claims 5-8 and 10-19 are in condition for allowance, and Applicant requests favorable action.

Should the Examiner wish to discuss this case, the Examiner is invited to call the undersigned at (312) 913-2141.

Respectfully submitted,

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